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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/417,767	10/14/1999	JUNYA KAKU	991181	7912

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EXAMINER

FLETCHER, JAMES A

ART UNIT	PAPER NUMBER
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2615

DATE MAILED: 09/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/417,767

Applicant(s)

KAKU, JUNYA

Examiner

James A. Fletcher

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 October 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 and 4. 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Dunton et al (6,151,069).

Regarding claim 1, Dunton et al disclose an electronic camera which records, by separately compressing, a plurality of screens of image signals to a recording medium, comprising (Col 2, lines 23-25 “a system and apparatus that operates in at least two modes to provide still and video images”);

- an image sensor for outputting camera signals of a subject at a predetermined time interval (Col 3, lines 12-18 :the digitized sensor signals...are then processed according to image processing methodologies by the video and still block in order to form still images, or a sequence of video images depicting motion by the exposed object or scene, depending on whether the still or video mode of operation has been selected"));
- a processor for creating the plurality of image signals from the camera signals outputted from the image sensor (Col 2, lines 33-36 "The different image processing operations are implemented...by programming a high performance data processor to execute the operations in software"));
- a calculator for calculating an optimal compression ratio for compressing a preceding one of the image signals to a target size (Abstract "logic circuitry to spatially scale and compress if necessary the raw image data in order to meet storage and transmission bandwidth constraints for video images");
- a compressor for compressing a current one of the mage signals with the optimal compression ratio (Abstract "logic circuitry to spatially scale and compress if necessary the raw image data in order to meet storage and transmission bandwidth constraints for video images"); and
- a recorder for recording to the recording medium the plurality of screens of compressed image signals created by the compressor (Col 3, lines 36-38 "The images are then stored aboard the apparatus and/or transferred to the host/PC").

Regarding claim 2, Dunton et al disclose an electronic camera wherein the calculator calculates the optimal compression ratio based on an arbitrary compression ratio, a signal size that the preceding image signal has been compressed with the arbitrary compression ratio, and the target size (Abstract “logic circuitry to spatially scale and compress if necessary the raw image data in order to meet storage and transmission bandwidth constraints for video images”).

Regarding claim 3, Dunton et al disclose an electronic camera comprising a selector (Col 3, lines 18-19 “Mode selection can be made by the user of the apparatus via mechanical controls”) for selecting one of a first recording mode to create within the recording medium a plurality of still image files separately accommodating the plurality of screens of the compressed image signals (Col 1, lines 65-66 “the second selection is designed to provide data for still images”) and a second recording mode to create within the recording medium one motion image file collectively accommodating the plurality of screens of compressed image signal Col 1, lines 63-65 “The first selection of scaling, decorrelation, and encoding is designed to provide video data”, wherein the processor creates a first resolution of an image signal when the first recording mode is selected and a second resolution of an image signal when the second recording mode is selected, and the target size being different between the first recording mode that the second recording mode (Col 5, lines 8-11 “the scaling and compression logic may be configured to reduce image size and resolution to yield smaller, less detailed video images, as compared to larger and more detailed still images”).

Regarding claim 4, Dunton et al disclose an electronic camera wherein the first resolution is higher than the second resolution, and the target size in the first recording mode being greater than the target size in the second recording mode (Col 5, lines 8-11 “the scaling and compression logic may be configured to reduce image size and resolution to yield smaller, less detailed video images, as compared to larger and more detailed still images”).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunton et al as applied to claims 1 and 3 above, and further in view of Mizoguchi (6,407,772).

Regarding claim 5, Dunton et al suggest an electronic camera wherein the processor creates one screen of image signal at a first predetermined interval when the first recording mode is selected and one screen of image signal at a second predetermined interval when the second recording mode is selected (Abstract “both still mode and video mode”), but does not specifically disclose a second predetermined interval.

Mizoguchi teaches a camera that can have multiple predetermined intervals (Col 3, lines 8-9 "An arbitrary speed equal to or lower than 60 frames/second can be assigned").

As suggested by Dunton et al and taught by Mizoguchi, repetitive picture taking is a known means of taking multiple still pictures at a given rate. Therefore, it would have been obvious to one of ordinary skill in the art to modify Dunton et al in order to take pictures at a second predetermined interval.

Regarding claim 6, Dunton et al suggest an electronic camera wherein the first predetermined interval is longer than the second predetermined interval (Abstract "both still mode and video mode"), but does not specifically state a second predetermined interval.

Mizoguchi teaches a camera with two different predetermined intervals (Col 1, lines 37-40 "In a movie-photographing operation in a camcorder, the photographing rate is fixed as 60 fields/second...conforming to broadcast standards" and Col 3, lines 8-9 "An arbitrary speed equal to or lower than 60 frames/second can be assigned").

As suggested by Dunton et al and taught by Mizoguchi, a movie or video rate camera can also have a slower repetitive picture taking rate. Therefore, it would have been obvious to modify Dunton et al in order to take pictures at a predetermined interval that is longer than the video interval.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Fletcher whose telephone number is (703)

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305-3464. The examiner can normally be reached on 7:45AM - 5:45PM M-Th, first Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Christensen can be reached at (703) 308-9644.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC 20231


or faxed to:

(703) 872-9314 (for Technology Center 2600 only).

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

JAF
August 25, 2003


VINCENT BOCCIO
PRIMARY EXAMINER